

REMARKS

The claims 1 through 8 were rejected as anticipated by Rudmann. Applicant requests reconsideration. Applicant commends the examiner for the excellent search and for the citing the primary the reference.

Claim 1 was amended to recite that the adapter is an extending adapter, and that the adjusting motors operate independently from the jaw motors for positioning the jaws to any of the respective positions prior to closing the jaws. As such, claim 1 is now not limited to an extending adapter ring, but any extending shaped adapter that is extending from the target spacecraft. The primary purpose of the present invention is to provide universal docking, so that the "jaws can be used to grasp both rectangular interfaces, circular interfaces, and irregular interfaces", (Spec. page 10 lines 7-8) The specification further teaches that the "jaws are radially adjusted so as to be aligned to the adapter ring and are then closed to grab the adapter ring" (Spec. page 9 line 15) That is, the specification teaches a two step operational process. The first step is to position the jaws about the mounting plate using the adjusting motors. The second step is to then close to the jaws by individual jaw motors to grab the extending adapter. The independent operation between the adjusting motors and the jaw motors allows the jaws to be firstly positioned at any desired position for grabbing irregular and well as regular extending adapters, also known as interfaces, as "The adjustability of the jaws enables the docking mechanism to be utilized for a variety of

1 target vehicles, including those not originally designed for
2 docking."

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4 The present invention, as with Rudmann, allows for the
5 grabbing of circular rings. However, Rudmann's design is limited in
6 two important aspects. Firstly, and unlike the preferred form,
7 Rudmann's jaws are concurrently positioned and closed using only
8 one motor. Secondly, and unlike the preferred form, Rudmann
9 disposes the jaws at equiangular positions, that is at 0°, 90°,
10 180°, and 270°, which suitably functions only for symmetrical
11 extending adapters such as the circular adapter. As Rudmann's
12 design is so limited, it does not provide universal docking, the
13 problem solved by the present invention. When Rudmann's motors is
14 actuated, all four equiangularly disposed jaws are concurrently
15 positioned and closed for only grabbing an extending adapter ring
16 that is circular, whereas, in the present invention, there is a two
17 step process where the jaws are firstly positioned using the
18 adjusting motors, and then secondly closed using jaw motors for
19 grabbing any shaped extending adapter, such as square, circular,
20 and irregular extending adapters, and hence, the present invention
21 is a universal docking systems, and Rudmann's design is not.

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1 As claim 1 is limited to this two step function with
2 independent operation, Rudmann does not anticipate the present
3 invention. Obviousness is a determination based upon the problem
4 solved and the solution thereto. Rudmann does not suggest the
5 universal docking problem solved by the present invention's
6 independent operation, and, hence Rudmann can not suggest the
7 solution of the present invention. Applicant requests allowance of
8 the claims.

9 Respectfully Submitted

10 *Derrick Michael Reid*

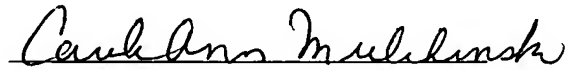
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Carole Ann Mulchinski

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